LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

Vol. X. LOUISVILLE, SEPTEMBER 18, 1880. No. 12.

R. O. COWLING, A. M., M. D., and L. P. YANDELL, M. D.
EDITORS.

It is probable now, while these cool September breezes are blowing and the thermometer sinks almost to the point of frost, that we may congratulate ourselves that the year 1880 will see no outbreak of yellow fever in the United States. We trust that proper efforts will be made to find out the causes of this exemption that they may be duly appreciated for the future. We throw it out in a sort of suggestive way to ask what quarantine has had to do for the matter. We have not heard that any more vigorous guard than usual has been kept at our seaports, and inland quarantine has cut no figure at all during the summer. We have learned an item or so, however, in regard to sanitary affairs in New Orleans and Memphis that may impress the not wholly prejudiced mind somewhat strongly. The Bayou Gayoso at Memphis has been cleansed of its years' accumulation of filth, and sewerage has been pushed vigorously on since the last visitation of the plague. In New Orleans also extraordinary efforts have been made to keep the city clean. It has turned out in some way or other that not only have these cities escaped the fever, but they have been singularly free of diseases of all characters. We hope the lesson will not be lost, and that those having the matter in charge will continue to look at home for the enemy, and not waste themselves in fruitless effort in border guards, which have proved dead failures.

In this connection we note an excellent article in the New Orleans States newspaper upon the drainage of that city. It is shown by the writer, who is apparently a competent engineer, that not only is it not difficult to drain New Orleans, as has been commonly believed, but that the situation of the city is peculiarly adapted for this purpose. It has sloping ground over a vast area of its river-front, and that part of it which inclines backward toward the swamp in its rear requires raising but an inconsiderable number of feet. There is in front of the city a deep and rushing river to receive the filth, and practical plans are suggested to fill the swamp by using the batture sands of the Mississippi and conveying them to their new location in semi-liquid state. It is an affair, to be sure, of some millions of money, but the increasing prosperity of the great southern emporium ought to be able before many years to command these. There certainly could be no better investment for New Orleans and the nation.

Poisoned Ham and Herrings.—This, from the London Lancet, is hard on Cincinnati, the "Paris of America." Of course it is only French Paris's jealousy and spite:

> The French police authorities have forbidden the sale of imported hams known in the trade as "Cincinnati." The yellow material in which they are sewn is colored with a chromate of lead. It is also said that they frequently contain trichinæ. It has been found, too, that the golden hue so appreciated by amateurs of "bloaters" is often imparted to them artificially by purveyors of this delicacy. Analysis has revealed here again the presence of one of the most toxic chromates.

The London letters from our special correspondent, which were interrupted for a while by his absence from London, will

hereafter appear from time to time in the NEWS. The first of the new series was published last week, and the second will be found in the present number. Aside from their charming newsiness, they are models of English composition, and must delight all scholarly readers.

PAPAW PEPSIN.—Now is the ripening time of the opossum's favorite fruit, the papaw. The papaw of the tropics is said to contain a pepsin equal to that obtained from pigs' and calves' stomachs. The digestive properties of our papaw should certainly be investigated.

Original.

REMARKS ON PROGRESS IN THE TREATMENT OF STRICTURE OF THE URETHRA.*

BY SIR H. THOMPSON, F.R.C.S.

Surgeon Extraordinary to His Majesty the King of the Belgians; Consulting Surgeon and Emeritus Professor of Clinical Surgery to University College Hospital; etc.

It may be in the recollection of some of us, perhaps, that a long and severe controversy was held on the management of stricture between authorities in London and the late Professor Syme, of Edinburgh, in which others also participated both in this country and in France.

The subjects then chiefly at issue were: 1. The value of caustic applications, which had long been used, and were at that time still much employed in the treatment of strictures which had proved rebellious to dilatation; and 2. The safety and efficiency of an operation for dividing the narrowed parts of the urethra by an adequate median incision carried through all the structures of the perineum, and involving the whole of the narrowed urethra. This operation was then warmly advocated by Professor Syme for obstinate and chronic examples of the disease, although the stricture might be permeable to instruments; indeed, that it should be so was a condition necessarily essential to Syme's operation. Perineal section had long been an established operation for impermeable stricture, but it was a novelty to perform it when an instrument could be passed through the stricture into the bladder; and a cutting operation was then declared by many surgeons to be unnecessary, if not unjustifiable, in such circumstances. Both modes of treatment have now almost disappeared. Are we to infer that progress in the art of treating stricture has therefore been made—that some better substitute for the methods alluded to have been adopted in their place? The answer to this question I propose to consider.

On carefully reviewing the course which surgical inquiry and practice have taken during the period named, and without troubling you in this brief record with names and details which, necessarily familiar to myself, would unduly extend its limits, I think that it might be answered that progress has been made. The march of events in this, as in other matters, is not always in a right line, but rather in that of an advancing pendulum. With occasional devious movements, right and left of the *via media*, an undoubted advance is ultimately achieved. The most important changes in relation to the treatment of stricture of the urethra during the last thirty years, in this country, may, I think, be classified under five heads:

1. A general recognition of the principle that a delicate and gentle manipulation of any instruments in the urethra is alone trustworthy or permissible in the place of that which was formerly greatly prevalent—viz. that urethral obstruction might frequently be overcome mainly by force.

2. The substitution of very pliable and taper instruments for silver and stiff gum-elastic instruments in much of the treatment, both in ordinary and in continuous dilatation.

3. A more general acceptance of the doctrine that—given time, patience, and gentle handling—very few strictures should be met with which can not be fairly and successfully traversed by an instrument passed through them into the bladder. At the same time an undoubted improvement is to be noted in the mode of operating for those exceptional cases in which the surgeon fails to accomplish that object.

4. A more general acceptance of the doctrine that dilatation of the urethra, whether with or without incision, may be carried with advantage to a somewhat higher degree than had for some time previously been regarded as desirable.

*Read in the Section of Surgery, in introducing a discussion on the subject, at the annual meeting of the British Medical Association in Cambridge, August, 1880. From advance sheets of British Medical Journal.

5. The substitution of internal urethrotomy in some form for the application of caustics and for external urethrotomy on a guide.

All these may, I think, be accepted, and will be generally accepted, as illustrations of advance in the treatment of stricture.

I propose to make a remark or two upon each of the topics named, at the same time venturing to indicate any thing which may appear to me to be a sign of retrograde movement at any point.

I need say little on the first subject—viz. the substitution of gentleness and more careful modes of manipulation for those which were previously in vogue. Men of the present generation scarcely know how rude and, in some hands, almost barbarous was the method of handling formerly employed in the treatment of urethral disease. The term "forcing a stricture" was then, as it had long been, an accepted surgical term both here and abroad, and denoted simply the systematic application of violence to an organic obstruction; the result of which, in nine cases out of ten, was, and could only be, the laceration of the canal and the making of a false passage. I suppose I am right in saying that such a proceeding is no longer a surgical one; and, if ever adopted, is intended to be an exceptional occurrence, and not within the limits of the rules of our art. If there was one thing more than another in the treatment of stricture which at an early date appeared to me unwarrantable, not to say shocking, it was the sight of a surgeon firmly grasping a solid instrument and pressing its point with rigid arm against an urethral obstruction until something gave way and the point was made to advance—somewhere. From the earliest time to the present I have invariably taught, not merely that a narrow stricture can only be traversed by gentle means, but that nothing prevents success so much as a deviation from this rule; and I believe that the constant advocacy of it has not been without its influence in suppressing the dangerous practice which formerly was but too common.

The substitution of modern flexible instruments, chiefly of French origin, for the silver catheters almost invariably used thirty years ago, when the old wax or plaster bougies had fallen, somewhat undeservedly perhaps, into disrepute, has been an advance of enormous importance. I first learned the value of flexible instruments many years ago in Paris, and have used them ever since, and still desire to speak in high terms of their practical utility in most of the varied forms and kinds in which they are presented. To a certain, although limited, extent some of them have aided us to achieve that very considerable advance in the treatment of stricture which was set on foot by the late Prof. Syme, and consisted in the doctrine (first distinctly taught and illustrated by him) that impermeable stricture is a condition of extreme rarity. In other words, he proved that almost any stricture, however narrow, if the urine passes outwardly through it, is permeable also to instruments in the hands of a careful, patient, and practiced surgeon, provided only there is no crisis of actual retention present demanding immediate relief. The gain accruing to the patient through this doctrine has been very great; since, thirty years ago, a dissection through the perineum for so-called "impermeable stricture" was a comparatively common operation in our hospitals, and one which, moreover, was often fatal. Very rarely, indeed, ought such a proceeding to be heard of now, since with time and patience a fine instrument can almost invariably be carried safely through any stricture into the bladder.

But these instruments are invaluable also in prosecuting the ordinary treatment known as "dilatation." Notwithstanding the small value set on this method by some surgeons, who profess to regard it as scarcely worth the name of treatment, and desire to substitute urethrotomy in almost all cases of stricture, whether recent or confirmed, I see no reason for discarding it. If the cutting operation necessarily conferred a cure, in the sense of preventing a return of the disease, even in a bare majority of cases, the propriety of employing dilatation might perhaps be called in question. This point will be considered hereafter; meantime there can be no doubt that such complete relief is afforded, and on terms which are easy, by the use of simple flexible bougies, or by the same supplied with lead cores, and, lastly, by well-polished tapering metal sounds, that I believe it to be in the patient's interest to employ dilatation only so long as it is quite efficient; and then as soon as it ceases to be so, and mostly not until then, to adopt other methods of a more serious kind.

To revert for a moment to the occasional existence of an "impermeable stricture" which has just been referred to, it may be briefly said that when, as sometimes happens, the surgeon fails after adequate trials to pass any instrument, however small, through a

XUM

narrow or tortuous stricture, the method known as "perineal section" sometimes proves a valuable resource. Like other proceedings, it has been rendered more easy and efficient and is a far safer operation than that which was done fifty years ago. Since that time various little improvements have been added to the details of the performance, so as to facilitate the finding of the narrowed passage.

The "caliber" or "diameter" of the urethra or the amount of its dilatability is a subject which has come again to the front during the last few years—this time from attention paid to the subject in America. This is one of those points relative to which our figure of the pendulum is in some measure applicable. It has always been a subject affording matter for discussion throughout the history of urethral surgery, relative to which had we time I could give you some curious illustrations. The different measurements made by anatomists at different epochs—and their name is legion—are remarkable chiefly for their diversity, and the rules of practice pursued by different surgeons have similarly varied. This is a fact which need not excite surprise, considering the complex nature of the passage, the relations of which have been so largely studied. The question is one of sufficient importance to be worth considering perhaps more closely. A good deal of the apparent discrepancy in the measurements, in the use of terms, and consequently in the practice of different surgeons, is due in my opinion to a certain failure among many to recognize what are the natural physical conditions of the passage in question. We hear of its size, of its diameter, of its caliber, as if the urethra were a tube of constant capacity—as if it resembled an artery, a bronchial tube, or an intestine. But in fact the urethra has no constant quality comparable with that which we call "size" in any sense in which that term applies to the passages just mentioned. Indeed, the urethra has no "size" or "caliber" when it is not used as a canal; and it is only thus used during a few minutes, one might rather say seconds, during the twenty-four hours, and also when artificially opened by the passing of a foreign body into it. It is simply a long chink, the sides of which are maintained in close contact by organic muscles, and traversing a mass of complex structures which, like itself, are susceptible of great physical changes under different circumstances. Second to its natural contractility, the most distinguishing mechanical quality of this closely shut passage is its dilatability—a still undetermined, and I may add an undeterminable, quality; for its dilatability naturally varies greatly in different parts of its course, in consequence of the variety in the nature of the surrounding structures, while its own delicate walls and subjacent tissues are almost indefinitely extensible under the influence of continued pressure.

During the first third of the present century there was a strong tendency, both here and in France, to regard the urethra as a passage of greater size than the surgeons of the preceding epoch had assigned to it, and to use larger instruments in the dilatation of stricture. Boyer advocated them, and later Mayor, of Lausanne, employed them, sometimes with much force. In this country Pearson, who had a large experience, made a point of carrying dilatation as a cure for strictures to Nos. 18 and 20, English scale, equivalent to about 28 to 32 of the French scale. One of his instruments has long been in my possession, and is here for your inspection. A good deal of mischief followed what may have been the indiscriminate use of these large bougies; hence a reaction took place and smaller sizes were adopted, with less beneficial influence perhaps upon the stricture itself, but also with less evil on the constitution of the patient. Within the last few years Dr. Otis, of New York, has revived the theory of "the large diameter of the urethra," and has advocated larger instruments, besides recognizing as examples of organic stricture very slight deviations from what he conceives to be the normal "caliber," or what I should regard as the possible extent of dilatability possessed by the passage. I have no intention of formally examining the views which he has enunciated relative to this matter, having no allotted time or space in this paper for the purpose. But I will venture to say in connection with this subject that we on this side may perhaps have erred somewhat during the period of reaction referred to in not sufficiently availing ourselves, especially in the practice of lithotrity, of the large degree of dilatability which the urethra undoubtedly possesses; and that we owe to our American brethren an advantage which the latest assertion of that fact has pointed out to us. And I desire hereby to record my sense of the value of that lesson by assuring them how gratefully I receive and profit by it. But I can not say thus much without saying also in the same breath that it is a very easy

thing to damage irreparably some individuals by overdistending the urethra, and that such damage I have of late witnessed in several instances. I must oppose also another doctrine which is associated with the preceding, namely, that stricture of the urethra is permanently cured by complete division of all the diseased tissues affecting the passage. I have seen too many examples of return of narrowing in cases thus operated on to admit that at present we possess any certainty of being able so to act on a confirmed organic stricture as to insure its non-appearance in after life. Further, I have carefully followed many of Syme's cases of external division in his and in my own hands, where the diseased structures constituting stricture have been entirely divided, and in a way more certainly complete than any internal urethrotomy can offer, and am compelled to avow that in very few instances indeed has the thus divided stricture not reasserted itself after the lapse of time. Nevertheless it is an important truth that when any portion of the stricture escapes division the narrowing speedily returns.

For that operation I have myself substituted internal urethrotomy in the treatment of obstinate cases during a period of now considerably more than twenty years, having ceased to perform Syme's operation as a rule in 1857. Since that date I have performed the internal operation at University College Hospital and elsewhere some hundreds of times. My experience leads me to regard it as a far safer proceeding than Syme's in relation to life, and one which is quite as efficient in relation to the general results.

But at the date named (1857) internal urethrotomy was rarely if ever employed in this country. The method best known here, viz. that advocated by Stafford, had lapsed through its inadequacy to render any important service, and dilatation and caustics constituted the treatment for the great majority of cases. Like many of my brethren therefore I tested other proposals which appeared soon afterward, such as by splitting the stricture, which attained a considerable popularity at the time, overdistension, etc. Like others, too, I believe that there are good grounds for the conclusion that for those examples of the disease which are so confirmed as to defy dilatation those methods are inferior in permanency of effect to a well performed—that is to say a complete —division by internal urethrotomy.

Nevertheless, regarding the many methods of performing internal urethrotomy which have been proposed and practiced, I doubt whether it is possible for any one to pronounce which is absolutely the best. In every one the object is, or ought to be, the same, viz. the complete division of the morbid tissue; but varied mechanical means of accomplishing this are originated by different minds, and different modes suit the hands of different surgeons. Each probably prefers to accomplish the object with the instrument with which he is most familiar, and that method will generally be the most efficient in his hands. At the same time many of the modes employed to accomplish internal urethrotomy will not insure the complete division of the strictured portions of the urethra, and such methods must be regarded as defective.

The principles which govern a sound procedure are more essential points for the surgeon to discover and to teach than a consideration of small details. These principles may be briefly stated, I think, as follows:

1. The necessity for a physical examination before operating to detect and estimate the narrowed portions of the urethra. This is best accomplished, in my opinion, by means of a series of metal bulbs on slender stems, taking care not to regard as diseased changes those points at which the urethra itself is naturally only slightly dilatable. These bulbous exploring sounds I have invariably used, advocating them as essential to diagnosis in my first work, twenty-six years ago; and I still prefer them to any other, as safer, less irritating, and not less efficient than more complex instruments which have been devised.

2. The necessity for accomplishing a complete division of all the morbid tissue constituting the stricture, by an incision carried through it—no matter what part of the urethra or how much of it is involved in the disease. As a general rule this is, I think, most efficiently completed by a slender blade carried beyond the stricture and made to cut from within outward—this latter proviso being, however, an open question. The important point, however, is that any alleviation of the patient's condition attained by operation will be transitory if any part of the narrowing be left undivided.

3. I regard it as essential after such division to place at once a full-sized catheter for some hours in the bladder to insure a free outlet for the urine and prevent all possibil-

XUM

ity of extravasation of urine into and through the incisions thus made.

4. The necessity for passing full-sized bougies subsequently, at occasional intervals, in order to effect free distension of the walls of the urethra, which lie in almost constant apposition, and so to prevent reunion of divided surfaces by the first intention.

The foregoing may, I believe, be held to embody those general principles which most experienced surgeons at the present day agree—with a few dissentients, I am aware—ought to guide us in practice. That there are different modes of carrying them out is, as I have before intimated, a matter no less of notoriety than of necessity, as inherent in the nature of things. Such a circumstance may be regarded as one fraught with some advantage for us here, in providing scope for discussion and so eliciting a comparison of ideas and methods among the many experienced observers who honor the section with their presence this day. I shall therefore very briefly offer my own views as to the best mode which a long familiarity with the operation in practice has led me to adopt.

In respect of the instrument employed I unhesitatingly avow a preference for one which in principle of construction resembles a slender knife with a long handle, in order that it may act completely in obedience to the impetus given to it by the hand. Concealed within a bulb at the end of the instrument is the blade; so that before this is unsheathed the urethrotome itself is an efficient bulbous-ended explorer (like those already employed in the previous exploration) and is used as such to identify the stricture again at the very moment of operating. With such an instrument the incision is directed solely by intelligence, and is limited or extended according to the sensations experienced by the operator's hand, of resistance or the reverse, just as happens in the analogous instance of division of tissues which are not visible, in the case of contracted tendon in clubfoot.

To my mind, having had some little experience of the last-named proceeding many years ago, when surgeon to the Marylebone Infirmary, the two operations much resemble each other, and alike require a skilled and unrestricted hand to accomplish a satisfactory division of the constricting tissues—the right amount, neither too little nor too much.

All urethotomes in which the blade can only move in a grooved director, and this is undoubtedly the most common mode of constructing them, produce a more or less uniform mechanical result, and are incapable of effecting any variation in depth and extent of incision, often necessary to accomplish adequate division in the varying conditions requiring operation. This is what I am compelled to regard as a serious defect, and explains my preference for the bulbous-ended instrument described. It is right to say, however, that the following objection to the latter is sometimes raised, viz. that very few strictures requiring operation are sufficiently open to permit the introduction through them of an urethrotome, the bulb of which is equal to No. 5 or 6 of the English scale. That may be quite true, but I have never seen a case of stricture, however obstinate or narrow, which could not be temporarily brought to the size required by tying in a slender gum-elastic catheter, and I think the advantage of operating in the manner described well worth the delay of a day or two devoted to such preparation of the urethra. Still I am quite ready to concede that an instrument which cuts by means of a blade advancing from without inward, on a guide previously passed, may be a safer one in some hands, especially if they be not thoroughly practiced in traversing the urethra. My experience of internal urethrotomy, which has been conducted in this way throughout—that is, on the same principle and with the same instruments—has been from the first exceedingly satisfactory. The operation itself is fraught with very little risk; the durability of the relief afforded is the chief question to ascertain. The last twenty years have enabled me to watch the history and course of a good many cases; and, speaking in general terms, I may say that the first three or four years after the proceeding, often more, are very comfortable for the patient; after which, at earlier or later dates, say from four to seven years afterward, he often finds himself reluctantly compelled to retreat a number or two in the size of the bougie, which he has been accustomed to pass once or twice a month. Instead of 11 to 13, English scale, he must be content with 9 or 10, or less; but he has no symptoms to complain of. At an interval, varying in different cases from seven to twelve years, the condition in some cases becomes troublesome, and the patient finds No. 7, 6—or 5 perhaps—frequently necessary, and also that some of the old symptoms have returned. In such circumstances I do not hesitate to advise another operation, and

have occasionally performed it a second time. It so happens that I did this for one of my medical brethren only last week, having previously employed the same proceeding in 1867, thirteen years ago. I passed a No. 17 English, about 28 French, with ease, immediately after the incisions, and he is now doing admirably. In one case only I have done the operation three times for the same patient. There is no reason why it should not be repeated, if necessary, just as we crush a second or a third calculus which may be formed after the first. In the case last referred to the best result followed the third operation, and occasional dilatation has been quite sufficient to maintain a highly satisfactory state of the urethra ever since, although the date of that operation is at least eight years ago. I am very certain that the plan I have followed is one of great value for cases in which dilatation does not afford adequate relief, and I certainly think we are more prone to err in withholding the operation than by recommending it too generally. Inadequate relief to the stricture involves irretrievable mischief to the urethra and kidneys, and many a life has been sacrificed to persistence in painful and inefficient attempts to dilate which might have been saved by free division of the stricture or strictures. The formation of a free passage for the urine is the necessary safeguard for the secreting organs, and there should be no loss of time in accomplishing it by internal urethrotomy so soon as the stricture is no longer readily amenable to the action of dilatation. But when the operation is adopted nothing less than a free and complete division of all the obstructing tissues should satisfy the operator. It can not be too often repeated that on this depends the success of the operation.

The great desideratum of the present time unquestionably is the discovery of a mode of treatment which shall permanently restore to the strictured passage its original dilatability. I can not say that a thoughtful consideration of the pathological condition which constitutes organic stricture emboldens me to hope that such a result can be insured by the application of any principles of action at present known to us. If this be so a large and important field for labor and for speculative inquiry is open in this direction. May it fall to the lot of some abler successor to this office of mine today to record the accomplishment of this great achievement before another thirty years have expired.

It remains only now for me to thank you for thus patiently listening to a sketch which, meager as it is, will have attained its object if it elicits practical communications from those present, who are so eminently qualified to make them with advantage to us all.

Correspondence.

LONDON LETTER.

FROM OUR SPECIAL CORRESPONDENT.

The British Medical Association at Cambridge—The Distribution of Honors—The Speech to Professor Gross—A full Description of the Ceremonies—Sir William Gull hissed—Its Cause—American Physicians in England.

The sensation of the meeting was the presentation of the honorary degrees of LL.D. upon some of the more distinguished members of the profession in England and foreign visitors. The University is very courtly and very conservative, and it confined its honors chiefly to the medical baronets and court officers—Sir William Jenner, Sir William Gull, Sir George Burrows, Mr. Simon, C.B., and Mr. Lister. Among foreigners America was honored in the person of Prof. Gross, of Philadelphia, who crossed the Channel especially to be present at this meeting and to receive this high distinction, and Prof. Brown-Séquard. Prof. Broca was designated for the honor, but his untimely death prevented his receiving it. Chauveau, of Lyons, whom it was intended to decorate with the scarlet gown, was absent; so also were Virchow and Langenbeck, of Berlin. Donders was present and received his degree. The degree-giving takes place in the ancient Senate-house, in great state. The doctors of the University sit in their scarlet gowns on a raised dais in a semi-circle on either side of the chancellor of the University, who is attended by the esquire beadles, who are masters of the arts, carrying the heavy silver maces, irreverently called the university pokers. The recipients of the honor are seated on either side of a semi-circle at the front edge of the dais facing the chancellor and robed doctors and with their backs to the audience. The Senate-house was crowded with doctors and the galleries filled with under-graduates. In the course of the ceremony the public orator takes his place, standing with his back to the audience and facing the vice-chancellor, but below and beyond the dais. Each

XUM

recipient of the degree, clad in his new scarlet gown, is conducted by the beadles to the public orator, and stands by his side, facing the vice-chancellor, while the orator, in a brief Latin oration, proclaims the scientific or other grounds on which the honor has been conferred, and formally introduces the new doctor to the chancellor, advancing with him under the guard of the beadles to the chancellor, who then lifts his cap, offers the new member of the University the hand of friendship, and inducts him into his doctorate.

The Latin speeches of Mr. Sandije were exceedingly felicitous, and his punning allusions to Sir William Jenner as having been a friend *generi humano*, of Dr. Houghton as having kissed the blarney-stone were received with much applause. I append the short speech in which he introduced Dr. Gross: "The venerable form of your distinguished colleague is now well known at our meetings; his dignified courtesy and personal amiability have endeared him to all with whom he has come in contact, and in learning and surgical skill he is held here in the highest esteem as a worthy representative of the greatest traditions of the American school."

Loud applause greeted him, and also all the other honorary doctors in their turn, with one marked exception. Sir William Gull has recently incurred the grave displeasure of the profession by the course which he has taken in reference to a recent trial at Guy's Hospital, of which I must give you a short outline, as being typical of a dispute as to the organization of nursing in hospitals, which is not confined to that hospital, but is verging to many. Guy's Hospital is an ancient foundation, possessing enormous revenues, which are administered by a treasurer, who is practically the governor of the hospital, and wields a despotism which is never disputed when tempered with deference and respect to the opinions of the medical officers and regulated by considerations of courtesy and public spirit. Mr. Lushington, the present treasurer, is an old Indian official, with autocratic ideas. Personally amiable and popular, he has, it is said, the misfortune to possess some lady relatives who have great influence over him and who are strongly tinged with what is known here as "High-church notions." Under this or some other influence the treasurer has lately appointed a matron who has revolutionized the system of nursing at Guy's Hospital and has carried out her changes with no gentle hand. Thirty of the old nurses of Guy's, including many who had been for a quarter of a century in service and some for much more, and who were universally liked and respected, have left the hospital rather than submit to the new system introduced. The medical officers have from the first strongly opposed the changes made, and an open war has broken out which has caused a great deal of public scandal—a scandal that culminated recently in a case in which one of the nurses had inflicted what is described as a punishment bath on a patient in the wards who was known to be suffering from tubercle of the lung, and who had fouled the bed. This patient was suspected to be suffering also from hysteria, but the symptoms attributed to hysteria now turn out to have been premonitory symptoms of tuberculæ of the brain. The unfortunate patient was treated with a great deal of roughness by the nurse, and was immersed in a bath for a period described by some as an hour and by others as an hour and a half. A rapid change for the worse occurred in her condition, and she died at the end of a few days, when acute inflammatory tubercular meningitis was found to have been the cause of death. The nurse was tried for manslaughter. Dr. Pavy, whose patient had been thus operated upon, gave evidence to the effect that prior to the death there had been no external signs of tubercular meningitis, and he believed that the shock to the system and the prolonged immersion in cold water had lit up the inflammation which had so rapidly proved fatal. In this opinion the whole of the medical staff concurred. Sir William Gull, however, who had for some time been coquetting with the lady authorities, and had been proclaimed more than once by them as supporting them against his colleagues, appeared unexpectedly at the trial without having previously communicated with his colleagues on the subject, and gave as his opinion, based upon the record of a clinical clerk, which had not even been submitted to Dr. Pavy, that Dr. Pavy ought from the first to have recognized the case as one of tubercular meningitis; that the case had only run its regular course; that neither the rough usage of the nurse nor the prolonged immersion in cold water had any thing to do with the acceleration of death of the patient; and generally his evidence aimed at exonerating the nurse and throwing the whole blame upon Dr. Pavy for want of acumen in not at first discerning the existence of tubercular meningitis and especially warning the

nurse. This course is blamed for two reasons — first, because it is believed that the clinical deductions of Sir William Gull are based upon the subsequent knowledge revealed by the post-mortem examination, and that the course of events subsequent to the bath has been unfairly used to support the opinion which was formed after the event, and would probably have been no more formed by Sir William Gull prior to the bath than by the physicians who saw the patient. Further, it is considered that when Sir William Gull formed this opinion he should at once have communicated with his colleague, when he could have ascertained that the clinical report on which he relied was one for which the physician was not responsible and which he had not seen. Sir William Gull would then have had the opportunity of discussing with Dr. Pavy the facts as he saw them from his point of view. The haste which he has shown to glorify himself at the expense of his colleagues and to appear as their accuser has produced a most painful impression. Moreover, it is remembered that he showed a similar tendency on the occasion of the death of the Emperor Napoleon, when he avoided, by a side plea, signing the report drawn up by Sir Henry Thompson and Dr. Burdon Sanderson subsequent to the autopsy of the Emperor, and found occasion to write a separate letter to the Times, in which he made himself appear as the wisest man of the party and as entertaining views which might have been of use in saving life had he been earlier consulted.

In the same way in the celebrated trial here connected with the poisoning of a person named Bravo, Sir William Gull at the inquest slighted the professional character of Dr. George Johnson, and gave evidence in a manner so contrary to professional traditions that he was summoned before the College of Physicians and received public reproof. In this case also Dr. Pavy has intimated his intention of making Sir William Gull responsible for conduct of an unprofessional and improper character. When, therefore, Gull appeared at Cambridge to receive his honorary degree there were already rumors that he might probably meet with by no means so favorable a reception from the members of the profession assembled as the other gentlemen who were to be thus honored. His actual reception, however, was of a kind unknown in the history of a university, and without parallel probably in the history of medicine. When the esquire beadle went to him ceremoniously in his seat and led him to the side of the public orator, who was to pronounce an eulogy upon him, a storm of hisses and groans arose from every part of the hall which was literally overwhelming in its bitterness. The hissing, hooting, and groaning continued for fully ten minutes. The undergraduates in the upper galleries were not slow to take up the cries, and for a long time running through the hall and above all were the overwhelming cries of "turn him out," "kick him out," and other even less complimentary cries, greatly scandalizing the vice-chancellor and the grave doctors of the University, to whom the scene, although not altogether unexpected, was in its intensity and severity no doubt painful. For a time which seemed an age Sir William Gull stood by the side of the public orator, as though a culprit in the custody of an officer, motionless, white, and unable to move in one direction or the other. Mr. Sandije showed great self-possession, standing quietly till the storm abated and then good-humoredly waving the students and assembled physicians into silence and cutting his oration as short as possible. Nevertheless when he admitted a phrase or two of eulogy he was met with cries of "tell that to the coroner's jury," and "three cheers for Pavy," at length the ceremony was completed. Sir William Gull left Cambridge immediately, being naturally unwilling to show himself again in an assembly which had treated him with so much contumely. Such a scene must have been doubly painful in the presence of all his leading colleagues in the profession, many of whom had just been so warmly cheered, and in the presence of many hundreds of well-known medical brethren from all parts of the country and of the leading members of the University. Fortunately for him time enough will be allowed to elapse before he will again make his appearance before the profession. In anticipation of the next International Congress he had already six weeks ago been elected president of the medical section through the influence of Sir James Paget, his fast personal friend, or certainly he would not now stand any chance of receiving that distinction; and it may be taken for granted that very few English physicians will be found in this section, and if he wishes to consult the interest of the Congress he will do well to resign that post, as otherwise the medical section will be empty.

The sectional proceedings at Cambridge have been marked with quite an unusual

XUM

standard of high scientific value, and it may be worth while presently to give you a short summary of some of their proceedings.

Sir James Paget, in the section of Pathology, delivered a magnificent address on the Relations of Vegetable Pathology to Animal Pathology, which will not be published for some time, but of which I shall hope to get for you advance pages, in order that you may be able to publish them at an early date. In the ophthalmic section there were present Donders, Bowman, Critchett, Priesky Smith, and others, who were to take part in the discussion on glaucoma; but it will serve to show how little is really known on this subject, that after Priesky Smith had opened the discussion by the enunciation of new views on glaucoma, Donders and Bowman both acknowledged they really knew nothing of the true pathology of glaucoma, and were not in a position to discuss the paper.

Lister, in an address, of which I am promised a copy for you, gave a charming account of the recent results of investigations by Pasteur and others on splenic apoplexy and fowl-cholera; by which in both cases not only have the specific organisms been identified which produce the disease, but the means of prevention have been ascertained, so that it ought to be and will be quite possible in the future to take means to prevent the occurrence of these scourges of our herds and of our poultry-yards.

Among the other Americans present were Dr. Marion Sims, who has always a warm welcome in England; Prof. Pallen, of New York, whose first visit it was, and who was, I believe, well satisfied with his reception, as were Dr. Beard and Dr. Bulkley.

Dr. Beard has got into some trouble here. The surgeon of the steamship complains that before starting from New York he ordered large quantities of his favorite drugs for the prevention of seasickness, and that he conducted his experimental series of treatment without entering into any communication with him. Some amount of amusement has been created by his referring to a treatise upon seasickness, which he seems to say Dr. Beard has published under the title of "Oh, my!" Dr. Beard, however, when questioned at Cambridge, stated that he had no knowledge of any such pamphlet, and no such absurd title had ever been used by him, and gave other explanations which are likely to be satisfactory. There is, however, an impression not altogether favorable to Dr. Beard upon this side of the water, in consequence of the profusion of rather vapid pamphlets with which he inundates his friends here, and of the pretentious and high-flown style in which he enunciates trite propositions and with which he seems to aim at exalting rather catch-penny subjects into a pseudo-philosophic position.

Most of your American physicians who have visited us have produced a favorable impression by their dignified reticence, by their evident intelligence and skill in their departments, and by always having something definite and useful to say when they spoke. It would be a great pity if the opinion should ever come to be held that any number of persons were to make British soil a sort of outpost from which to direct floods of pompous eloquence on trivial subjects over the medical world here or elsewhere; and a word of caution may not be unnecessary in that respect, although I am free to confess that it is only a very few at present for whom any such caution is needed. Sims, Sayre, Gross, Loring, Van Buren, and the Yandells (if you will pardon me for saying so), and many other representative Americans who have visited England, have left behind them impressions so warmly favorable and of such brotherly regard that this reminiscence alone will long insure a hearty welcome to all American physicians who may be tempted to find themselves at the meeting of the British Medical Association or at any other medical gathering on this side of the ocean.

Miscellany.

THE BRITISH MEDICAL ASSOCIATION DINNER.—The president of the Association, Prof. Humphrey, presided, and was supported by the Lord Bishop of Ely, the vice-chancellor, the mayor of Cambridge, Sir James Paget, Bart., Prof. Gross, Dr. A. Carpenter, Prof. Donders, Prof. Longmore, Prof. Acland, Dr. Brown-Séquard (Paris), Dr. Paget, Dr. Beard, the Rev. Dr. Haughton, and Mr. Savory. The company at the master's table also included the Public Orator, the Senior Proctor, Prof. Reyher, Drs. Clark, J. Crichton Browne, Bradbury, Embleton, Marion Sims, Lister, Stewart, Waters, Dennis O'Connor, Mr. Spencer Wells, Mr. Ernest Hart, Mr. W. D. Husband, and Mr. Cobb. The company at the dean's table included Profs. Macnaughtan Jones, Marey, Bowditch, Preyer, Liveing, Westphal,

and Ranvier; Drs. Toussaint, Worms, Shann, Strange, Stokes, Ogston, Warlomont, Lucas-Championnière, Weber, Wood, Playfair, Durrant, Wade, Lancelott, White-Cooper, Roberts; Messrs. Fowke, A. H. Gross, Critchett, Holmes, Langley, Hulke, Chiene, Hurrell, John Wood, Cadge, J. W. Clarke, and Balfour.

Of the British Medical Journal, whose circulation Mr. Ernest Hart has brought up to ten thousand copies in twelve years from two thousand, its circulation when he became its editor, the Rev. Dr. Haughton, M.D., F.R.S., said he had now a very disagreeable duty to perform after the beautiful music they had just heard and the poetical speeches; for he had to recall them from the heights of Olympus to our common mother earth, in speaking of some matters of importance in the past, present, and future history of the Association. There were a great many great men who lived before Agamemnon, but unless they had a poet to sing their praises they were not remembered beyond one or two generations after the time in which they lived. The present great British Medical Association could not have continued unless it had had some mouthpiece or organ to make it known to the world, and that mouthpiece was the British Medical Journal. [Cheers.] It was now his duty, having been called on to perform it by authority, to sing in his own humble hexameters the praise of the Journal and its editor, Mr. Ernest Hart. [Cheers.] Dr. Haughton proceeded to say that he could claim to speak with authority upon journalism, for among the gifts of an Irishman were those of writing and his right to take, sometimes, both sides of the question. [Loud laughter.] They had heard the Times called a "great organ," the "great Colossus," but some affected to know all about it and not to believe in it. Now he would let them into the secrets of that "little Colossus," the Journal. It had for many years a delicate constitution. [A laugh.] It had a great deal of "physicking." [A laugh.] It had, moreover, change of air, change of scene, and continual change of nursing. [Loud laughter.] Now the great change which strengthened it and brought it to its present vigor was when its present editor, Mr. Ernest Hart, was appointed as its dry nurse. [Loud cheers and laughter.] That happened in the year when the Association had its meeting within the walls of Trinity College, Dublin. The English members had come over there, and they found that the Irish were an exceedingly pleasant set of fellows to come among [laughter], and the Irish members found that the English were good men, and quite open to be introduced to any thing good, including John Jamieson's whisky [laughter], or any thing else that was good. Now the Journal had a committee of management—a very excellent principle, no doubt—and the thing worked well or ill, accorking to the wisdom and knowledge of the committee. If he were editor and had a bad committee, or an interfering committee, he should kick over the traces and pull his head out of the halter in no time [cheers]; but if he had a wise committee—that was to say, a committee which had the discretion to trust to his discretion [a laugh]—he should pull "right away," as Mr. Hart did, for the good of all. [Cheers.] Now the Association needed an editor with common sense. He did not undervalue common sense; but some people had nothing else but very common sense; but he liked to have a sprinkling of genius with the common sense. [Cheers.] The result of the choice of Mr. Ernest Hart as editor was seen in the fact that from that very moment the Journal, in size and circulation, had begun and steadily continued to grow enormously. [Cheers.] It had proved to be the bond of association between the members who could not come to the annual meetings and those who came, and it was besides now the great journal of the medical profession. The Journal was not a mere advocate of a trades-unionism; it was not the mouthpiece of the rights of associated members, or of a profession against the greater public—a public that would not submit to any such principle, but it was, under wise management—and, as Dr. Bradbury, the reader of the address in Medicine had pointed out, under the editorship of Mr. Hart—the organ of the rising modern scientific medicine, which, without disparagement to the great master, Hippocrates, must be called the medicine of the future—the science of calculation, observation, and study—a science opposed to empiricism. [Loud cheers.]

THE LATE DR. FRANK H. DAVIS.—The chief cause of death, as shown by a post-mortem examination, was an acute suppurative inflammation of the left kidney, accompanied by so persistent a reflex irritation of the stomach that during the last three weeks of life his sole dependence for support was on nutritive enemas.—*Chicago Med. Jour. and Exam.*

XUM

Selections.

The Digestive Action of Papaw-juice and Papain. — Bouchut has shown (*Comptes Rendus*) that the juice of the papaw and papain contains an agent capable of forming with albuminoid substances a combination having all the characteristics of assimilable peptones (American Observer). In making further experiments with dilute papaw-juice or with papain upon living tissues, healthy or pathological, as adenomas and cancers, he attained results of great interest. These tissues are digested by the agent and converted into peptones in the same manner as dead albuminoid matters. Thus if a dilute solution of papaw-juice or of papain be injected into the brain of an animal, by means of the hypodermic syringe, a digestion of the cerebral substance with which the agent has come in contact is found to take place. All this portion, if examined twenty-four hours after death, presents a yellowish, softened appearance, and in a circumscribed point has formed a nidus for yellow, and in some cases reddish, pulpy softening. The animal, in three or four hours after the injection, falls in collapse, becomes paralyzed on one or both sides of the body, and dies in apparently great agony. If, however, an injection of papain or of papaw-juice be made into the muscles of the thigh, buttocks, or loins of an animal a marked change in the muscular tissue is noticed twenty-four hours afterward. In that portion of the muscular tissue where the papain has lodged a softened, pulpy, and galatinous substance is found surrounded by normal muscular tissue; this soft substance has been formed from digested muscle. In seven experiments the same results were reached in every instance.

Bouchut then turned his attention to pathological tissues, injecting the solution into adenomas and cancers. In three cases of adenoma of the neck where the injection was used violent pain followed in about two hours, and a severe attack of fever was brought on. Three days afterward the tumors became softened and were converted into abscesses, which after being opened with a sharp instrument healed in two out of the three cases. In three cases of cancer of the breast and in one case of cancer of the groin injections of papain led to softening and digestion of the large, hard tumors. The liquid formed was drawn off from one of the tumors with the aspirator, and on analysis by Henninger proved to be a veritable peptone, showing then that the action of papain on cancerous tissue is true digestion. When injected into cancers the solution, although neutral, produced great pain and a formidable attack of fever.

A frog, partly skinned, when placed entire into a dilute solution of the papaw-juice died in twelve hours, was partly digested in twenty-four hours, and at the end of ten days nothing was left but its skeleton.

These experiments tend to show that organized tissues, living or dead, may be peptonized by this substance, which is as it were vegetable pepsin.

Chrysophanic Acid—A Caution.—Physicians prescribing chrysophanic acid should warn their patients against the accident of introducing it into their eyes. Dilatation of the pupil and intense inflammatory itching and burning are produced, and druggists preparing the acid for use often suffer from these annoyances.

The Contagion of Consumption.—Nearly fifteen years ago Budd, one of shrewdest clinicians who ever lived, wrote, "The following are the principal conclusions to which I have been led regarding phthisis or tubercle: 1. That tubercle is a true zymotic disease of specific nature in the same sense as typhoid fever, scarlet fever, typhus, syphilis, etc. are; 2. That like these diseases tubercle never originates spontaneously, but is perpetuated solely by the law of continuous succession; 3. That the tuberculous matter itself is (or that it includes) the specific morbific matter of the disease, and constitutes the material by which phthisis is propagated from one person to another, and disseminated through society; 4. That the deposits of this matter are therefore of the nature of an eruption, and bear the same relation to the disease, phthisis, as the yellow matter (the stools), for instance, of typhoid fever; 5. That by the destruction of this matter on its issue from the body by means of proper chemicals, or otherwise, seconded by good sanitary conditions, there is reason to hope that we may eventually, and possibly at no very distant time, rid ourselves entirely of this fatal scourge."—*Dr. Jas. T. Whittaker, in the Med. Rec.*

Bony Tumor in Muscle.—In the *Presse Méd. Belge* Dr. Thiriar relates the case of a sawyer, thirty-six years old, whose foot slipped while playing at skittles, he at the time having in his hand a bowl weighing between twenty and thirty kilos (Medical Times and Gazette). He felt a violent pain opposite the insertion of the adductor longus in the pubis. Next day he felt in this locality a tumor the size of a pea, which gradually enlarged in all directions. At first it caused neither pain nor inconvenience; but after a while pains came on and motion became first difficult and then impossible. When Dr. Thiriar first saw the patient, some weeks after the accident, he found a hard conical tumor five centimeters in length, extending from the pubis into the adductor. Its removal was accomplished between two and three months after the accident, the adhesion to the pubis being so strong as to require the use of a forceps. It was found to be a true osteoma composed of spongy bony tissue. It was supposed to have originated in the portion of the adductor attached to the pubis, and gradually invading the muscular tissue. Recovery from the operation was complete three months after the occurrence of the accident.

Fever in India.—An Indian official paper published in the Northwest Provinces Government Gazette gives some details as to the epidemic of fever which prevailed in those provinces last year. The epidemic appears to have caused the death-rate to exceed the average by over twenty-one per thousand, and it is estimated that seventy-five per cent of the whole population suffered from the disease. The two worst districts were Bulandshahr and Alighur, in both of which the ratio of deaths from the fever was one hundred and thirteen per thousand. Meerut came next with eighty-one, and most of the other districts showed very high rates. Dr. Planck, the sanitary commissioner, describes the epidemic as essentially climatic, and ascribes its severity and great mortality to the vast number of persons who had been brought to a low state of health by the high prices and distress of the two previous years. The specific cause was, he thinks, malaria, resulting from the copious rainfall of the year.—*Med. Times and Gazette.*

XUM